

The uBalance system utilizes two accelerometer nodes and a gateway to detect if a person has fallen. If a fall occurs, the gateway will alert a computer, which can then take appropriate action. Read this manual completely before operating the uBalance system.

Positioning

- Secure the leg and chest nodes in the positions as seen in Figure 1. The nodes are labeled accordingly. The leg node should be placed below the knee.
- Ensure the nodes are secured in the orientation seen in Figure 2. The PCB antenna should be pointing upwards.

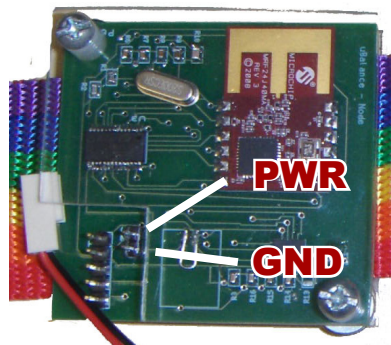


Figure 2.

Start Up Sequence

- Ensure the appropriate software is installed as explained in *Software Installation*.
- Connect the gateway to a PC using a usb cable.
- Launch the uBalance PC application, select the appropriate COM Port and click connect as seen in Figure 3.
- Connect the battery pack to the chest and leg nodes one-at-a-time. Power connects to the upper pin of the two pin header, and ground connects to the lower pin as indicated in Figure 2.
- Ensure the uBalance system is connected with a test fall condition. The uBalance PC application should display "FALL!" in the alert field.

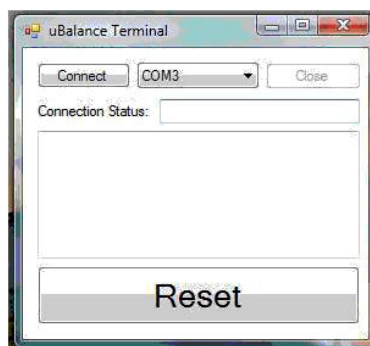


Figure 3.

Troubleshooting

- **Fall Alerts Not Occurring:** Disconnect power from the gateway and nodes and perform the section *Start Up Sequence*.
- **uBalance PC Application Not Connecting:** Disconnect the usb cable from the computer. Close the uBalance PC application and reopen it. Reconnect the usb cable and try to connect again.



Figure 1.

Software Installation

- Install the driver package mchpcdc.inf to enable USB communication between the gateway and PC.
- To launch the uBalance PC application, run uBalance.exe